Factors Affecting The Purchase Decision Of Cargo Cycles By Commercial Users
Santhanakrishnan Narayanan\textsuperscript{a,*}, Johannes Gruber\textsuperscript{b,c}
\textsuperscript{a}Technical University of Munich (TUM) | \textsuperscript{b}German Aerospace Center (DLR) | \textsuperscript{c}Humboldt University of Berlin
\textsuperscript{*}santhanakrishnan.narayanan@tum.de | johannes.gruber@dlr.de

MOTIVATION & OBJECTIVES
• Pertinent literature shows several advantages & replacement potential for cargo cycles
• There are still reservations among fleet decision-makers & logistics operators
• It is unclear who will purchase & which factors will influence the purchase
• Primary objective: Identify the factors that influence the actual purchase decision of cargo cycles by commercial users
• Secondary objective: Comparison between the actual purchase decision & the purchase intention stated at the end of a 3-month vehicle trial
• The insights for policy-makers and industry can support them in improving cargo cycle penetration and reduce the reservations against their use in commercial transport

DATA COLLECTION
• Data from Europe’s largest cargo cycle testing project, Ich entlasse Städte
• Freelancers, private companies, public organizations & NGOs across Germany had the opportunity to test a cargo cycle for 3 months
• 18 different cycle models, of 5 construction types, were made available
• Data collection from the participating organizations through longitudinal survey (before and at the end of the trial phase), GPS device & mobile app
• Follow-up query is made regarding the actual purchase decision, between 3 to 12 months after the end of the trial phase

METHODOLOGY

ESTIMATION RESULTS (BINARY LOGIT MODELS, $\alpha = 0.10$)

DATA COLLECTION

FINDINGS & DISCUSSIONS
• A higher share of intent (48.5%), compared to actual purchase (32.0%)
• Different driving factors; E.g., actual purchase significantly influenced by hard facts like the deteriorating conditions for conventional vehicles
• There is a need to translate intention to actual decision, when making conclusions based on intentions (e.g., SP survey results)

INTENTION VS ACTUAL DECISION
• Cargo cycles can substitute car trips, supporting cities to achieve air quality & carbon emission reduction goals
• Organisations with limited catchment areas are more likely to purchase
• Regulative frameworks that discourage the use of conventional vehicles (e.g., vehicle access restrictions) can accelerate the penetration
• Policies aimed at improving the operational benefits (e.g., implementation of dedicated cycles lanes) are beneficial
• Campaigns that promote the soft benefits of cargo cycles, along with purchase subsidies, will have a positive impact
• Trial schemes are effective tools in reducing the negative reservations towards cargo cycles
• Longtail bikes & heavy-load trikes are suitable to replace commercial light vehicles (e.g., vans), to carry bulky & heavy goods

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